

REMARKS

The Applicant thanks the Examiner for indication that a claim for foreign priority under 35 U.S.C. §119 have been acknowledged and certified copies of the priority documents have been received by the Office.

A minor correction of the specification has been performed by this amendment.

Claims 1 to 13 currently are active in the application. By the present amendment claim 1 has been amended in order to emphasize the features of the invention. The support for amended claim 1 is provided at least in Figure 3B and lines 11 to 17, on page 10 of the specification. Additionally, claims 12 and 13 have been added for the Examiner's consideration. No new matter is introduced by this amendment. The Examiner is respectfully requested to reconsider the application in a view of the above amendments and the following remarks.

Claim 1 has been rejected under 35 U.S.C. §102(e) as being anticipated by Asano et al. (U.S. Patent 6,636,181). This rejection is respectfully traversed for the reason that the reference to Asano et al. fails to show the present invention.

The present invention provides an on-board antenna apparatus employing the helical antenna element which is placed in the antenna case which can be securely attached by the base of the antenna case to interior of motor vehicle or the like and wherein antenna case can be manually or automatically tilted in the direction toward a satellite or any other source of signals in order to provide the optimized signal reception.

The reference to Asano et al. discloses a laptop computer system with a base or keyboard part hingedly attached to a lid (display) member. The laptop disclosed by Asano can transmit the high-frequency signal in a non-contact manner between the antenna of the base unit and the antenna of the lid in such a way that there is no need to provide a signal cable between the base unit part and the lid part.

In the office action the Examiner states that the reference to Asano et al. shows all limitations of claim 1 of the present invention. Applicant respectfully disagrees and points out to the Examiner that the system shown by Asano et al. has nothing in common with the claimed invention. For instance, the Examiner states that the structure 104 (lid or display part of the laptop) of Asano et al. is an antenna case in the same time pointing to 109 as an antenna element. The Examiner ignores the fact that Asano et al. shows the antenna system consisting of three elements 106, 109 and 111. Second, according to the present invention an antenna element is placed inside of an antenna case 2. It easily can be seen that all three antenna elements of Asano et al. are not placed inside of a base part 101, the first antenna 106 and second antenna 109 are placed between the top and base parts of the laptop and third antenna 111 is located on the lid part of laptop 104. Asano et al. describes the structure the following way, “...the base unit part 101 is provided with a radio device (transmitter/receiver assembly) 108 for generating proper signals used to communicate with another computer system and peripheral devices and a first antenna 106 coupled to the radio device 108 via a signal cable 107. The lid part 104 is provided with a second antenna 109 and a third antenna 111 coupled to the second antenna 109 via a signal cable.” (Column 4, lines 19 to 26) Furthermore, the Examiner states that, “an antenna base 101, coupled to the antenna onto an installation face.” There is no coupling an antenna to installation face in the present invention. The claim 1 asserts, : ...an antenna base, coupled to the antenna case, and attached onto an installation face, ...” . Next, the Examiner states that there is an angle regulator 103, adjusting a relative antenna case 104 and the antenna base 101 case, and attached angle 112 between the antenna case 104 and the antenna base. It is not true since the lid portion of laptop which the Examiner considers as analogical to the claimed antenna case does not have an antenna inside. Additionally hinges 103 in Asano et al. are used to move the display for viewing during use of a laptop when the present invention moves an antenna case in order to provide an optimized angle of signal reception.

Furthermore, Asano fails to show the feature “the antenna element having

directivity in a vertex direction” as recited in claim1. Asano shows a simply dipole type antenna element 109 which does not have the directivity in a vertex direction. Additionally, Asano fails to show the feature “the angle regulator adjusting a relative angle between the antenna case and the antenna base to optimize a sensitivity of the antenna element to a received signal” as recited in claim 1. Asano shows note type PC (see Fig. 1 and 2) in which the third antenna element 111 and the second antenna element 109 do not function when the lid part 104 is opened (see column 5, lines 44 to 48 of Asano).

In order to emphasize this aspect of the invention claim 1 has been amended. Specifically, claim 1 as amended recites, “ an angle regulator, adjusting a relative angle between the antenna case and the antenna base to optimize a sensitivity of the antenna element to a received signal.” (Emphasis added) As amended, it is submitted that claim1 clearly defines over the patent to Asano et al.

Claims 2-3 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Asano et al.(U.S. Patent No.: 6,636,181) in view of Nishikawa et al. (U.S. Patent No. 6,034,643). This rejection is also respectfully traversed for the reason that the combination of Asano et al. and Nishikawa et al. neither shows nor suggests the claimed invention.

The patent to Asano et al. has been distinguished above. The Examiner relies on the reference to Nishikawa et al. for a driving unit, moving the angle regulator so as to mechanically adjust the relative angle between the antenna case and the antenna base. Since claims 2 and 3 directly and indirectly depend from amended claim 1, it is respectfully submitted that Nishikawa et al. cannot make up for the deficiency of Asano et al. Therefore, claims 2 and 3 are allowable.

Claim 4 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Asano et al. in view of Imura et al. (U.S. Patent No. 5,909,653). This rejection is also respectfully traversed.

The reference to Asano et al. has been distinguished above. The Examiner relies on patent to Imura et al. as disclosing a plunger. The Applicant

respectfully submits claim 4 also directly depends from amended claim 1 and therefore is allowable.

Claims 5-11 have been rejected under 35 U.S. C. §103(a) as being unpatentable over Asano et al. in view of Ogino et al. (U.S. Patent No. 5,805,113). This rejection is also respectfully traversed.

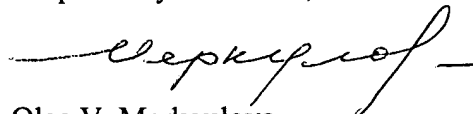
The Examiner relies on patent to Ogino et al. as showing the limitations for hook hole and a drawing-out grooves. However, these limitations are not related to the essence of the present invention and since claims 5 to 11 directly and indirectly depend from amended claim 1, they are also allowable.

In view of the foregoing, it is respectfully requested that the application be reconsidered, that claims 1 to 13 be allowed, and that the application be passed to issue.

Should the Examiner find the application to be other than in condition for allowance, the Examiner is requested to contact the undersigned at the local telephone number listed below to discuss any other changes deemed necessary in a telephonic or personal interview.

A provisional petition is hereby made for any extension of time necessary for the continued pendency during the life of this application. Please charge any fees for such provisional petition and any deficiencies in fees and credit any overpayment of fees to Attorney's Deposit Account No. 50-2041 (Whitham, Curtis & Christofferson, P.C.).

Respectfully submitted,



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